

ANN SAVENDER\*  
ANNE GOODWIN CRUMP  
VINCENT J. CURTIS, JR.  
RICHARD J. ESTEVEZ  
PAUL J. FELDMAN  
RICHARD HILDRETH  
FRANK R. JAZZO  
ANDREW S. KERSTING  
EUGENE M. LAWSON, JR.  
SUSAN A. MARSHALL\*  
HARRY C. MARTIN  
GEORGE PETRUTSAS  
RAYMOND J. QUIANZON  
LEONARD R. RAISH  
JAMES P. RILEY  
KATHLEEN VICTORY  
HOWARD M. WEISS

\* NOT ADMITTED IN VIRGINIA

**FLETCHER, HEALD & HILDRETH, P.L.C.**

ATTORNEYS AT LAW  
11th FLOOR, 1300 NORTH 17th STREET  
ARLINGTON, VIRGINIA 22209-3801

(703) 812-0400

TELECOPIER

(703) 812-0486

INTERNET

www.fhh-telcomlaw.com

DOCKET FILE COPY ORIGINAL

FRANK C. FLETCHER  
(1939-1985)  
ROBERT L. HEALD  
(1956-1983)  
PAUL D.P. SPEARMAN  
(1936-1962)  
FRANK ROBERSON  
(1936-1961)  
RUSSELL ROWELL  
(1948-1977)

EDWARD F. KENEHAN  
(1960-1978)

CONSULTANT FOR INTERNATIONAL AND  
INTERGOVERNMENTAL AFFAIRS  
SHELDON J. KRYS  
U. S. AMBASSADOR (ret.)

OF COUNSEL  
EDWARD A. CAINE\*  
MITCHELL LAZARUS\*  
EDWARD S. O'NEILL\*  
JOHN JOSEPH SMITH

WRITER'S DIRECT

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

703-812-0440

lazarus@fhh-telcomlaw.com

**BY HAND DELIVERY**

Magalie Salas, Esq.  
Federal Communications Commission  
445 12th Street, SW, Room TW-B204  
Washington, DC 20554

**Re: Reply Comments of the  
Fixed Wireless Communications Coalition  
IB Docket No. 99-81**

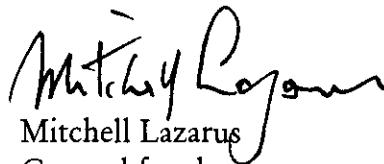
Dear Ms. Salas:

I enclose for filing with the Commission the original and nine copies of "Reply Comments of the Fixed Wireless Communications Coalition" in the above-captioned proceeding.

Kindly date-stamp and return the extra copy of this filing.

If there are any questions about this filing, please call me at the number above.

Respectfully submitted,



Mitchell Lazarus  
Counsel for the  
Fixed Wireless Communications Coalition

ML:cm  
Enclosures

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List A B C D E

Before the  
**Federal Communications Commission**  
 Washington DC 20554

In the Matter of	)	
	)	
The Establishment of Policies and	)	IB Docket No. 99-81
Service Rules for the Mobile Satellite	)	RM-9328
Service in the 2 GHz Band	)	

**REPLY COMMENTS OF THE  
FIXED WIRELESS COMMUNICATIONS COALITION**

The Fixed Wireless Communications Coalition (FWCC)<sup>1</sup> submits these Reply Comments in the above-captioned proceeding.<sup>2</sup>

The 2 GHz MSS applicants have proposed a variety of feeder link schemes to support their operations.<sup>3</sup> Most of these requests seek frequencies that are heavily used by the Fixed Service. (The table in Appendix B identifies terrestrial spectrum targeted for MSS feeder links.) The FWCC's sole concern in this proceeding is the threat of diminished capacity and increased interference to the Fixed Service.

As our Comments explained, the Fixed Services are an unsung but vital part of the Nation's infrastructure, providing communications essential to the energy, transportation, and

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<sup>1</sup> The FWCC is a coalition of equipment manufacturers and users interested in terrestrial fixed microwave communications. Its membership includes manufacturers of microwave equipment, licensees of terrestrial fixed microwave systems and their associations, and communication service providers and their associations. Its membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, the broadcast industry and their respective associations, telecommunications carriers, landline and wireless, local, and interexchange carriers, and others. A list of members is attached as Appendix A.

<sup>2</sup> Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, IB Docket No. 99-81, Notice of Proposed Rulemaking, FCC 99-50 (released March 25, 1999) (Notice). The FWCC filed first-round comments on June 24, 1999.

<sup>3</sup> See Notice at ¶¶ 49-66, and particularly the table at ¶ 50.

telecommunications industries, among others, and playing a key role in public safety and other governmental operations. The Comments also showed how a series of recent Commission decisions and proposals have cut sharply into the spectrum and coordination opportunities available to the Fixed Services. Together, these actions and proposals have left the Fixed Service with insufficient spectrum for continued operation and the reasonable expansion it needs to meet the requirements of the industries and governmental agencies that rely on it for essential services.

A grant of the MSS applicants' requests for frequencies that impinge on Fixed Service spectrum would exacerbate the shrinkage of spectrum for these important functions. For these reasons, the Comments asked the Commission not to designate additional fixed service spectrum for MSS feeder links.

In the alternative, if the feeder links cannot be placed elsewhere, then we ask for rules that permit equitable sharing by the Fixed Service in practice, as well as in principle. The sharing issue is especially critical with regard to NGSO facilities, as each site "sterilizes" a much larger area against Fixed Service operations than a GSO earth station does. Accordingly, we requested rules that recognize both the realities of NGSO operation and the legitimate needs of Fixed Service operators for spectrum.<sup>4</sup> These requests are consistent with the FWCC position in

Request for Declaratory Ruling and Petition for Rule Making of The Fixed Wireless

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<sup>4</sup> Specifically, we asked for rules that limit total numbers of feeder link earth stations; collocate the feeder link earth stations of various MSS providers; site feeder link earth stations away from population centers and intercity routes; require use of the largest feasible antennas for feeder link earth stations; shield feeder link earth stations; and set standards for earth station spectrum efficiency. We also requested coordination procedures that reserve limited spectrum for Fixed Service growth; require coordination only over the azimuths actually used by an earth station; and require an earth station that accepts a higher-than-desired interference objective when coordinating to give a subsequent Fixed Service applicant the benefit of the same higher level.

Communications Coalition.<sup>5</sup> That proceeding seeks a declaratory ruling and changes to the Commission's rules and coordination procedures that, taken together, pave the way for more equitable sharing between terrestrial fixed services and satellite services generally.

Here, we are particularly alarmed that the Notice made no mention of the likely impact of shared-spectrum MSS feeder links on Fixed Service operations and expansion.<sup>6</sup> The International Bureau, which drafted the Notice, seems almost to have overlooked the thousands of Fixed Service licensees operating in many of the bands it proposes to make available for MSS feeder links. Eight other commenting parties share our concerns.<sup>7</sup>

We are equally troubled that nearly all of the MSS commenters follow the Bureau's lead in ignoring the present occupants of their proposed feeder link bands. With only one exception, none of the MSS comments gives even passing recognition to the fact that these bands are heavily used for the provision of needed services.<sup>8</sup>

The FWCC appreciates the valuable services that MSS facilities will make possible, and has no wish to hinder their deployment. But we ask the Commission to consider the equally

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<sup>5</sup> RM-9649 (filed May 5, 1999). The FWCC request appeared on public notice in Report No. 2334 (released June 11, 1999).

<sup>6</sup> See Comments of FWCC at 1.

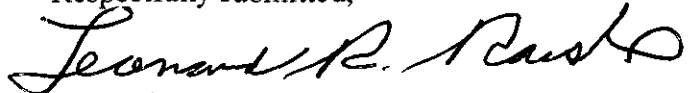
<sup>7</sup> Bosch Telecom, Inc.; SBC Communications, Inc.; UTC, the Telecommunications Association; Century CNN Programming, Inc.; APCO; Association of American Railroads; Tim Lynch; and Society of Broadcast Engineers, Inc.

<sup>8</sup> The exception is The Boeing Company. Its Comments (at 22) refer to an earlier submission that promised its system will comply with the PFD limits for 11 GHz provisionally adopted by WRC-97 in Resolution 131, and further, that Boeing will undertake whatever modifications are necessary to comply with the final interference limits adopted by WRC-2000 and the Commission. The Boeing Company, 2 GHz MSS System Ku-Band Feeder Link Technical Supplement, in File No. 179-SAT-P/LA-97(16) (filed Jan. 8, 1999).

valuable services now being offered by the terrestrial Fixed Services in the spectrum requested for feeder links. Especially in light of other spectrum losses to satellite services, Fixed Service users need these bands to meet essential needs in the energy, transportation, and telecommunications industries, among others, and in public safety and other governmental operations. The MSS feeder links should be located elsewhere.

If the Commission does require sharing in these bands, it must accommodate continued and expanded use by the Fixed Services. To that end, the FWCC asks the Commission to impose reasonable restrictions on MSS feeder link earth station numbers, collocation, siting, antenna size, shielding, and spectrum efficiency, and to establish coordination procedures that will yield equitable sharing of geography and spectrum, as outlined in our June 24 Comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Leonard R. Raish". The signature is fluid and cursive, with a large, stylized "L" and "R".

Leonard R. Raish

Mitchell Lazarus

FLETCHER, HEALD & HILDRETH, P.L.C.

1300 North 17th Street, 11th Floor

Arlington, VA 22209

703-812-0400

Counsel for the Fixed Wireless

Communications Coalition

July 26, 1999

## **Appendix A**

### **MEMBERS OF THE FIXED WIRELESS COMMUNICATIONS COALITION**

#### **USERS**

Association of Public-Safety Communications Officials  
American Mobile Telephone Association  
UTC - The Telecommunications Association  
National Association of Broadcasters  
Independent Cable Telecommunications Association  
American Petroleum Institute  
International Wireless Cable Association  
Personal Communications Industry Association  
CBS Communications Services  
Norfolk-Southern Railroad  
Union Pacific Railroad  
Burlington-Northern Railroad  
BellSouth  
Bell Atlantic  
SBC Communications, Inc.  
People's Choice TV  
Association of American Railroads  
Nortel Networks

#### **MANUFACTURERS**

Harris Corporation -- Farinon Division  
Alcatel Network Systems Inc.  
Digital Microwave Corporation  
Sierra Digital Communications  
California Microwave, Microwave Data Systems  
Tadiran Microwave Networks  
Spectrapoint Wireless LLC

## **Appendix B**

### **MSS FEEDER LINK REQUESTS IN TERRESTRIAL SPECTRUM<sup>1</sup>**

<b>Band</b>	<b>Applicant</b>	<b>Feeder Links</b>	<b>Terrestrial Use</b>
5091-5250 MHz	Constellation II	NGSO uplink	Unlicensed U-NII
5150-5250 MHz	ICO	NGSO uplink	Unlicensed U-NII
6425-6575 MHz	Inmarsat Horizons	GSO downlink	CC, LTTS, OFS, BAS, CARS
6700-6875 MHz	Globalstar	NGSO downlink	CC, OFS
6700-7075 MHz	Constellation II	NGSO downlink	CC, OFS
6775-7075 MHz	MCHI Ellipso 2G	NGSO uplink	CC, OFS
10.70-10.95 & 11.20-11.45 GHz	TMI Cansat-M3	GSO uplink	CC, LTTS, OFS,
11.597-1.700 GHz <sup>2</sup>	Boeing	NGSO downlink	CC, LTTS, OFS
11.70-12.20 GHz	Globalstar	GSO downlink	LTTS
12.75-13.25 GHz	TMI Cansat-M3	GSO downlink	CC, LTTS, OFS, BAS, CARS
14.0-14.4 GHz	Globalstar	GSO uplink	LTTS
14.391-14.500 GHz <sup>3</sup>	Boeing	NGSO uplink	LTTS
17.70-18.35 GHz <sup>4</sup>	Celsat	GSO downlink	CC, OFS, BAS, CARS
19.30-19.70 GHz <sup>5</sup>	Iridium Macrocell	NGSO downlink	CC, OFS, BAS, CARS
27.50-28.35 GHz	Celsat	GSO uplink	LMDS
29.10-29.50 GHz <sup>6</sup>	Iridium Macrocell	NGSO uplink	LMDS

### **Notes**

1. MSS requests are from The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, IB Docket No. 99-81, Notice of Proposed Rulemaking, FCC 99-50 (released March 25, 1999) (Notice). Fixed Service data are from 47 C.F.R. § 101.101.
2. The Commission indicated it will consider the Boeing requests as part of the SkyBridge rulemaking in ET Docket No. 98-206 and related application proceedings. Notice at ¶ 61.
3. See preceding Note.

4. In IB Docket No. 98-172, the Commission proposed to designate 17.7-18.3 GHz on a primary basis for terrestrial fixed service. GSO FSS would have secondary access.
5. IB Docket 98-172 proposes to retain 19.3-19.7 GHz on a co-primary basis for both terrestrial fixed use and MSS feeder links.
6. The 29.10-29.25 GHz segment is allocated on a co-primary basis to LMDS and NGSO MSS feeder links. This is the LMDS "hub-to-sub segment," intended for to forward transmissions from the LMDS operator to subscribers. The 29.25-29.50 GHz segment is allocated to GSO FSS, co-primary with MSS. See Redesignation of the 27.5-29.5 GHz Frequency Band, 11 FCC Rcd 19005, 19033-34 (1996).



## **CERTIFICATE OF SERVICE**

I, Crystal McElroy, a secretary for the law firm of Fletcher, Heald & Hildreth, P.L.C., hereby certify that true copies of the foregoing "Reply Comments" were sent this 26th day of July, 1999, via Hand-Delivery to the following:

Chairman William E. Kennard  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Commissioner Harold Furchtgott-Roth  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Commissioner Michael Powell  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Commissioner Susan Ness  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Commissioner Gloria Tristani  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Donald Abelson, Chief  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 6<sup>th</sup> Floor  
Washington, D.C. 20554

Roderick Kelvin Porter, Deputy Chief  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 6<sup>th</sup> Floor  
Washington, D.C. 20554

Richard B. Engelman, Chief  
Planning & Negotiations Division  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 7A-760  
Washington, D.C. 20554

Damon Ladson, Deputy Chief  
Planning & Negotiations Division  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 7A-761  
Washington, D.C. 20554

Ronald Repasi, Chief  
Satellite Engineering Branch  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 6A-505  
Washington, D.C. 20554

Kimberly Braum  
Satellite Engineering Branch  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 6B-540  
Washington, D.C. 20554

Julie A. Garcia  
Satellite Engineering Branch  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 6B-554  
Washington, D.C. 20554

Jennifer Gilsonan  
Satellite Policy Branch  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 6A-520  
Washington, D.C. 20554

Harry Ng  
Satellite & Radiocommunication Branch  
International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 6A-668  
Washington, D.C. 20555

Thomas J. Sugrue, Chief  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 3C252  
Washington, D.C. 20554

D'Wana Terry, Chief  
Public Safety & Private Wireless Division  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, SW, 4th Floor  
Washington, D.C. 20554

Herb Zeiler, Deputy Chief  
Public Safety & Private Wireless Division  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, SW, 4th Floor  
Washington, D.C. 20554

John Cimko, Chief  
Policy Division  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 3C124  
Washington, D.C. 20554

Ed Jacobs  
Policy Division  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 3C1620  
Washington, D.C. 20554

Dale Hatfield, Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 7C-155  
Washington, D.C. 20554

Rebecca Dorch, Deputy Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

Bruce Franca, Deputy Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

Julius Knapp, Chief  
Policy & Rules Division  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

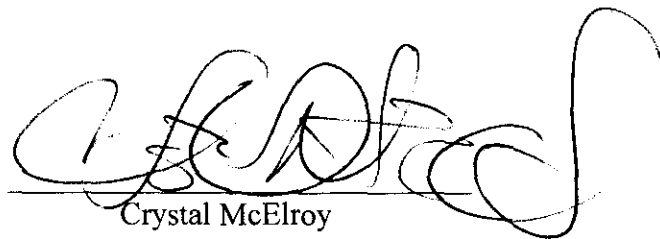
Karen Rackley, Chief  
Technical Rules Branch  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

Geraldine Matise, Deputy Chief  
Policy & Rules Division  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

Charles Iseman, Chief  
Spectrum Policy Branch  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

Tom Derenge  
Spectrum Policy Branch  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 7<sup>th</sup> Floor  
Washington, D.C. 20554

International Transcription Service  
1231 20<sup>th</sup> Street, N.W.  
Washington, D.C. 20037



Crystal McElroy